

Sawmills

The earliest mill my informant, Mr. Chas. Erickson can remember altho not the year, is a Cummings mill on Boomer flat at the west end of Daniel Canyon. Still old stumps in the mountains round about there. John Cummings mill.

Dave Thacker, son of Chas E. Thacker remembers of saw mills being operated at the head of the South Fork of the Provo River by Turners, Alexanders, Watkins of other settlements and P.H. McGuire of Buysville, all in what was called Mill Hollow. Chas. Thacker had the contract todo the logging at the McGuire mill. Had ten yoke of oxen which his brothers John and Fred Thacker drove for him, John mostly. Lumbering here started in 1888 and continued on through the years.

Chas. Thacker operated a shingle mill in this same hollow and also John Campbell, both mills being run by steam. Tom Clegg had a shingle mill run by water near the McGuire mill. The water powered mill was much slower than steam.

Shingle timber had to be clear, free from knots, straight grained white pine or what is called Engleman Spruce now, Dave says, to make good shingles. The trees were hauled in full length and sawed into 16 inch blocks. Sawed with big drag saws run by a big wheel on a shaft which was connected so as to drag the saw back and forth, powered by steam. The sawed blocks were quartered with an ax.

These pieces were then put into a big tight steam box and steamed over night until soft and to draw the sap out.

so the shingles would not split when in use. They were tough and lasted so much longer than the present day sawed shingles do. (I can testify to that, The old barn I have, of Grandpa John P. Anderson's had shingles from these mills, put on the roof in 1893 and altho they were weather beaten as thin as paper, they were not replaced until 1943. We still have some of the shingles). Julia M. Anderson.

The shingles were cut with a knife which worked in a big steel frame. This was run by an elbowed shaft which in turn was propelled by a belt run from a pulley. This rigup allowed the knife to go up and down. All run by steam. A man stood at a waist high bench feeding the hot blocks to the knife, twisting the block back and forth and then turning it over to keep the shingles even. The thick and thin ends of the shingles were formed this way. One man fired the vat all night long with waste from the mill to keep these blocks steaming hot. The men handling the hot blocks had to wear canvas finger stalls to prevent having fingers burned.

Girls bunched the shingles - 250 in a bundle, four bundles for a thousand shingles. The girls kneeled or sat on sacks filled with sawdust or hay, while bunching. They had a frame 18 inches wide to put the bands on, then lay their shingles on. At one side of the bundles was an upright frame with a sort of lever or stick in the center which the girls pulled down and sat or kneeled on until they could nail the tin strips on. Fred Buell cut all the tin-inch strips used for tieing these bundles. He had a machine to cut the strips with. The girls bunching at the Thacker mill were Ollie and May Duke,

Marie and Em Christensen, Lena and Dena Anderson, Josie Todd, and Minnie Miller, Josephine Peterson cooked.

A good buncher could bunch 10,000 shingles a day at 10¢ per thousand. Sometimes they bunched by the light from big bonfires. Only bunched first class shingles. Dave's father said he cut two million shingles one summer. All the lumber and shingles cut and sawed was used locally or in the surrounding counties.

Nels, Faun and J.C. (Skinny Jim) Murdock worked for Charles Thacker, Jack Smith of Daniel was the night fireman for the steam vat.

Campbells also had a shingle mill in Mill Hollow on the South Fork of the Provo. Aunt Lizzie Campbell Wahlquist, mother of John T. Wahlquist and the other boys and Mable, bunched shingles there.

Chas. Thacker also made shingles at Forman Hollow in Daniel Canyon in 1903. Dave can remember one afternoon they ran out of tin strips so Dave had to come through DanielCanyon to Heber on muleback for more strips. Got to Heber by dark. Buell cut the strips for him after dark so Dave could leave early the next morning and Dave made it back to the mill in time for breakfast. Dave told what a faithful mule that was and how fast it could travel. Breakfast in those days came early.

The roads at this early date were so very poor and only horses or oxen could be used to pull the load out of the mountains and to the towns which took days. I know the road in Daniel Canyon twisted back and forth across the Daniels Creek so about fourteen bridges had to be maintained. It was the same everywhere else.

... . Before we get to our first example, let's take a look at how we can implement this in Python. We'll start by defining a class that represents a node in a linked list:

```
class Node:
    def __init__(self, value):
        self.value = value
        self.next = None
```

As you can see, each node has two attributes: `value`, which stores the data, and `next`, which points to the next node in the list. Now, let's implement the `append` method:

```
def append(self, value):
    new_node = Node(value)
    if self.head is None:
        self.head = new_node
    else:
        current_node = self.head
        while current_node.next is not None:
            current_node = current_node.next
        current_node.next = new_node
```

This method takes a value and creates a new node with that value. If the list is empty, it sets the `head` attribute to the new node. Otherwise, it iterates through the list until it finds the last node, and then sets its `next` attribute to the new node.

Now, let's implement the `print` method:

```
def print(self):
    current_node = self.head
    while current_node is not None:
        print(current_node.value)
        current_node = current_node.next
```

This method simply iterates through the list and prints the value of each node. Finally, let's implement the `length` method:

```
def length(self):
    current_node = self.head
    count = 0
    while current_node is not None:
        count += 1
        current_node = current_node.next
    return count
```

This method uses a counter to keep track of the number of nodes in the list. It iterates through the list and increments the counter for each node until it reaches the end of the list.

Tom Clegg had a water power shingle mill in Mill Hollow next to McGuire mill but the couldn't cut as fast as the steam mills.

McGuires also had a saw mill in McGuires Canyon which takes off north from the highway 40 in Daniel Canyon. It's through this same canyon the Strawberry water of the Daniel Irrigation Company enters Daniel Creek. Life was hard for all who worked at these mills or anywhere else. The families of the mill owners made their homes there, often the wives cooking for the crews. When this wasn't possible the girls twelve and on up in age had to do the cooking and all work connected with that. There wasn't a great variety of food to select from. They, like the men who opened up the early canals into the valley, had flour with soda for leavening to make their bread with and not too much else to go with it.

The loggers liked to use oxen in the timber much better than horses. They were steady and not easily excited and if heavy pulling was needed they would pull harder and harder till whatever they were hitched to would finally come with them. Horses would become too excited and see saw back and forth or balk which always created trouble. Then, too, oxen didn't need double trees to fasten to their loads as horses did but just a long chain from the yoke. Oxen could get over the logs more easily and could go through loose snow and mud where horses would be bogged down. Oxen could be talked to and directed until they almost seemed to have human understanding.

Dave tells of an experience Homer Fraughtan who was logging for one of the mills in the Hollow, had Fraughton was digging around a log to work a chain under, when the log rolled onto his leg. He knew it would be broken if it wasn't rolled back

off the same way. He worked and worked and directed the oxen until he could get a roll hitch on the log, then directed the oxen how to go so they pulled the log off his leg so he wasn't hurt at all. So these animals were valued highly in the pioneers minds. Also they weren't nearly as expensive as horses and required no grain at all as horses did.

Dave tells that in 1907 he broke three oxen at Sugar Springs in Strawberry Valley to use for logging at their mill there. Had to rope the wild steers and then break them to the yoke after which he used them to log with and to haul lumber down to the valley from the mill. One was very mean because he had been blinded on one eye by having a cheat grass work through his eye. If anything happened to pass this blind side he would kick hard and fast. Dave remembers coming along with a load of lumber through Daniel's settlement when Minnie Nelson (now McKenzie) started to ride by this oxen and as soon as the oxen saw the horse, *in his good eye he whaled loose & caught Minnie on the leg.* Dave also told of an instance in the timber where a Seven-day Adventist worked as a sawyer. This Mr. Hann would only work alone-rigged up a frame to hold the saw to the tree while he was sawing. One day he was sitting on a stump sharpening his saw when Dave came along with these oxen. Dave told Hann he'd better move but Hann refused to. Dave's were oxen named Twist, Tex, Broad and Turks. Dave called, "Gee Twist and at the same time the blind oxen saw Hann sitting there. The oxen leaped just cleared over Hann's head tipping him over backward and scattering his tools. Dave said Hann always watched out after that.

Dave also told of one experience while logging of being caught with his back against a big tree with the oxen Broad in front of him with his head in Dave's stomach squeezing the breath from him and the horns on either side of Dave pressed astride the tree pulling the chain tighter all the time. Dave was trying to talk to them and old Broad, Dave said, "seemed to be trying to hold back as far from Dave as he could." Dave said he finally could let out a loud enough yell so help came from the other workers and he always felt old Broad had helped to save his life so he always thought a great deal of him.

Incidentally Dave still breaks oxen once in awhile. Broke a pair and drove with a covered wagon in the Centennial Parade in Salt Lake City.

The U.S. Government also had a saw mill at Sugar Springs, in Strawberry Valley, Dave said, from where the lumber was hauled to Ft. Duchesne. ("Skinny Jim" Murdock worked there) Dave Murdock was one freighter and John Cummings who still lives. (DEAD NOW).

John and Addie Wooton had a mill way up in the head of Point of Pines south of the present highway 40.

In 1905 the Wasatch Development Co. had Mill A and Mill B. in the north end of Strawberry Valley.

Corey Hanks had a small store in Daniel Canyon after he lost his eyes and hands in the explosion. (You could talk to him about that).

The store and service station at the head of Daniels Canyon now owned by Ace Betheras was first operated by a Theo Freeze and his brothers of Ogden, who built it in 1905 at the time

the reservation was opened.

Before the railroad the government maintained a station at what is now named Station Hollow in Daniel Canyon where mail carriers between Salt Lake City and Denver could change horses. The present highway 40 goes almost along this trail that went from Heber into Daniels Canyon.

Timbering and sawing still goes on in these mountains. Much is used locally and for the mines and in late years quaking aspen is being cut and hauled in to Charleston to be made into excelsior which is used in many ways. In olden times the aspen was a main source of fuel.

More information on McGuire mill in Daniel Canyon from Annie McGuire Bethers.

Mill below road at McGuire Canyon and houses above. She was born in 1879 and they came from Washington in Southern Utah, when she was three to buy this mill from Dan Bigelow in 1892. Moved out of Daniel Canyon in 1886 and to Soapstone in 1887.

Zed Bethers informant

Clegg Canyon - Shingle mill

Cummings Canyon saw mill

Thornton Hollow saw mills

Three Forks - saw mills

McGuire Canyon - Turners sets McGuire

Shingle Hollow Noakes shingle mill

•Please see notes from 10/18

¹ See also the discussion of the relationship between the two concepts in the section on "Theoretical framework" above.

and the project. Each team will be assigned a leader who is responsible for overall project outcome. Each team will be provided structure, time, budget, and access to resources as well as guidance through a coach.

...such as the one I have just described, which is a very good example of the way in which the author has tried to make his book appeal to a wide audience.

and the author's own family and friends. The author's wife, Linda, and their two sons, Michael and Christopher, were present at the ceremony.

Lequel de nos deux amis est au mieux dans la position d'assurer la sécurité de l'ordre public et de faire respecter la loi ?

and a series of small, thin, curved, whitish filaments of *Bacillus* sp. 55
survived at 27°C and 25°C, but died at 20°C and 15°C.
At 10°C and 5°C, all cultures survived, but only the 5°C
survived at 0°C, 20°C, and 25°C.

Chemical reactions

5.3. *Algalia* e *complaint*

and the more difficult conditions

Additional information = www.ncbi.nlm.nih.gov

and its off-shore areas, as well as northern Australia.

Effect of initial condition on the evolution of the system